

### **ABSTRACT OF THE DISCLOSURE**

[0037] A wireless input device having an outward appearance resembling a standard ballpoint pen operates as both a standard ballpoint pen or similar writing instrument as well as an input device. The pen includes directional sensors for determining the direction and length of each pen stroke. A transmitter is provided in the pen barrel for transmitting the stroke signals directly to a computer for input and processing each stroke to provide an accurate representation of the pen stroke as it is being made. The transmitter may be a wireless device for transmitting a low frequency radio signal to a receiver associated with the computer. This permits the pen to be utilized anywhere within the transmitting range of the device, and in any orientation, with the computer picking up, processing and storing the signal representing the pen strokes. The pen may also be a wired device where desired, which while making the device less versatile, may permit the incorporation of less expensive devices while preserving the general versatility of the device. The sensor system breaks the stroke signal into typical "x" and "y" coordinates, the "z" axis monitoring pressure so that the thickness and boldness of the stroke is preserved as well. Both the orientation of the stylus and the direction of the stroke may be monitored, permitting bold and thin strokes to be made such as, by way of example, in calligraphy style writing or in more sophisticated graphic representations.